

## **REMARKS**

Claims 29-33, 36, 38, 39, 43-45, 47, 49-51, and 56 are pending in the application.

Claims 29-33, 36, 38, 39, 43-45, 47, 49-51, and 56 are currently amended and claims 34, 35, 40-42, 48, and 53-55 are canceled. Applicants respectfully submit that no new matter is added to currently amended claims 29-33, 36, 38, 39, 43-45, 47, 49-51, and 56.

Claims 29-33, 36-50, and 56 stand rejected under 35 U.S.C. §101.

Claims 29, 43-51, 55, and 56 stand rejected under 35 U.S.C. §112, first paragraph.

Claims 29-33, 37-40, 43-45, and 53-56 stand rejected under 35 U.S.C. §102(e) as anticipated by U.S. Patent Application Publication No. 2004/0015386 to Abe et al., hereinafter, Abe.

Applicants respectfully traverse the rejections based on the following discussion.

### **I. The 35 U.S.C. §101 Rejection**

Claims 29-33, 36-50 and 56 stand rejected under 35 U.S.C. §101 because the Office Action asserts that the claimed invention is directed to non-statutory subject matter.

With respect to the rejection of claims 29-33, 36-42, and 56, the Office Action asserts "that the claimed method steps could simply be performed by mental processes alone and are not statutory." (Office Action, page 2, section 7).

Applicants respectfully submit that independent claims 29 and 56 are currently amended to recite in relevant part,

" A method for automatically providing a marketing strategy to address at least one specified merchant objective, the objective corresponding to a specified time period and a specified budget, the strategy being implemented across at least one marketing channel, the strategy including at least one initiative, the method comprising:

inputting, by a merchant, said at least one specified merchant objective, said at least one specified merchant objective including said specified time period and said specified budget;

...

outputting, to said merchant, the optimal marketing strategy".

Applicants respectfully submit that independent claims 29 and 56, as currently amended, clearly describe "automatically providing a marketing strategy" by *inter alia* "inputting, by a

merchant, said at least one specified merchant objective" and "outputting, to said merchant, the optimal marketing strategy". Thus, Applicants further respectfully submit that currently amended claims 29 and 56 do not describe a wholly mental process because the claims describe a merchant inputting information, which upon automatic processing by a system, provides an optimal marketing strategy to the merchant.

With respect to the rejection of claim 43-50, the Office Action asserts that no physical structure is recited. (Office Action, page 3, section 8).

Applicants respectfully submit that independent claim 43 is currently amended to recite in relevant part,

"A system for automatically providing a marketing strategy to address at least one specified merchant objective, the objective corresponding to a specified time period and a specified budget, the strategy being implemented across at least one marketing channel, the strategy including at least one initiative, the system comprising:

a memory for storing said at least one specified merchant objective, which is inputted by a merchant, said at least one specified merchant objective including said specified time period and said specified budget as constraints; and

a microprocessor configured to:

generate a plurality of possible marketing strategies ... ."

Applicants respectfully submit that "a memory" and "a microprocessor", as recited in currently amended, independent claim 43, are physical structures.

With respect to the rejection of independent claim 49, Applicants respectfully assert that a program storage device is a physical structure, such as a magnetic disk having a pattern of magnetic domains incorporated within the physical structure of the disk. Furthermore, Applicant's description of a "program storage device" is in accordance with the ruling of In re Beauregard, 53 F.3d 1583 (Fed. Cir. 1995).

For at least the reasons outlined above, Applicants respectfully submit that claims 29-33, 36-50 and 56, as currently amended, satisfy the statutory requirements of 35 U.S.C. §101. Withdrawal of the rejection of claims 29-33, 36-50 and 56 under 35 U.S.C. §101 is respectfully solicited.

## **II. The 35 U.S.C. §112, First Paragraph, Rejection**

Claims 29, 43-51, 55, and 56 stand rejected under 35 U.S.C. §112, first paragraph.

With respect to the rejection of the claims for using the phrases, "initializing a value ...", "on a state of a customer", and "the given state", Applicants have deleted these phrases in the currently amended claims.

With respect to the phrase, "modeling customer's preferences ... as effective constraints", in claim 51, Applicants have currently amended the claims to recite "assigning customer's preferences ... as constraints". That is, for example, a customer's preference for the Internet as a marketing channel is assigned as a constraint, when evaluating actions of a policy (the adjective, effective, is also deleted because the Specification does not always use this adjective).

With regard to claims 43-50, Applicants respectfully submit, as argued above in the rejection of claims 43-50 under 35 U.S.C. §101, that independent claim 43 is currently amended to recite physical structure, while independent claim's 49 description of a "program storage device" is in accordance with the ruling of In re Beauregard, 53 F.3d 1583 (Fed. Cir. 1995).

As to the phrase, "the specified budget", lacking antecedent basis, Applicants respectfully point out the "a specified budget" is recited in the preamble of the independent claims.

Therefore, "the specified budget" has proper antecedent basis.

For at least the reasons outlined above, Applicants respectfully submit that claims 29, 43-51, 55, and 56, as currently amended, satisfy the statutory requirements of 35 U.S.C. §112, first paragraph.

## **III. The 35 U.S.C. 102(e) Rejection over Abe**

### **A. The Abe Disclosure**

Abe discloses that his invention includes a method of sequential decision making (e.g., sequential cost-sensitive decision making) for customer relationship management. The method includes providing customer data (e.g., consumer data, client data, donor data, etc.) comprising stimulus-response history data, and automatically generating actionable rules based on the customer data. Further, automatically generating actionable rules may include estimating a value

function using reinforcement learning (e.g., reinforcement learning and dynamic programming). For example, estimating a value function may include value iteration. (Paragraph [0014], which is cited by the Office Action).

Abe also discloses that the method may be applied to cross-channel optimized marketing. For example, the method may include providing customer data including stimulus-response history data from a plurality of channels, integrating the customer data, and automatically generating channel specific actionable rules based on the customer data. For instance, in this case, the method may optimize (e.g., nearly optimize) cross-channel cumulative profits. (Paragraph [0019], which is cited by the Office Action).

Abe further discloses that the invention is extendible. That is, channel-specific rules can be edited to meet constraints. The invention is robust. That is, channel-specific rules are robust to changes. In addition, the invention is compatible. That is, channel-specific rules can be incorporated into existing channel-specific CRM installations. (Paragraph [0195]).

## **B. Arguments**

Currently amended, independent claims 29 and 56 recite in relevant part,

"inputting, by a merchant, said at least one specified merchant objective, said at least one specified merchant objective including said specified time period and said specified budget as constraints;

generating a plurality of possible marketing strategies, each of said plurality of possible marketing strategies comprising a set of initiatives, which are deployed together in a given sequence for said specified time period,

wherein said initiatives include any of bundling of products, cross-sells, up-sells, coupons, discounts, promotions, advertisements, surveys, and customer feedback,

...

wherein said various actions are constrained by a choice of a marketing channel."

Similarly, currently amended, independent claim 43 recites in relevant part,

"a memory for storing said at least one specified merchant objective, which is inputted by a merchant, said at least one specified merchant objective including said specified time period and said specified budget as constraints; and

a microprocessor configured to:

generate a plurality of possible marketing strategies, each of said plurality of possible marketing strategies comprising a set of initiatives, which are deployed together in a given sequence for said specified time period,

wherein said initiatives include any of bundling of products, cross-sells, up-sells, coupons, discounts, promotions, advertisements, surveys, and customer feedback,

...

wherein said various actions are constrained by a choice of a marketing channel."

The only recitation of "constraints" by Abe is disclosed in paragraph [0195], i.e., "channel-specific rules can be edited to meet constraints".

Applicants respectfully submit that Abe does not disclose, teach or suggest a specified time period or a specified budget, which are inputted by a merchant, as constraints to generating a plurality of possible marketing strategies; nor does Abe disclose a marketing channel, derived from a customer's preference, as a constraint to an action in a policy associated with a marketing strategy. In fact, Abe only discloses that unidentified constraints may be used to edit channel-specific rules to an unidentified effect.

For at least the reasons outlined above, Applicants respectfully submit that Abe does not disclose, teach or suggest at least the present invention's features of: "inputting, by a merchant, said at least one specified merchant objective, said at least one specified merchant objective including said specified time period and said specified budget as constraints; generating a plurality of possible marketing strategies, each of said plurality of possible marketing strategies comprising a set of initiatives, which are deployed together in a given sequence for said specified time period, wherein said initiatives include any of bundling of products, cross-sells, up-sells, coupons, discounts, promotions, advertisements, surveys, and customer feedback, ... wherein said various actions are constrained by a choice of a marketing channel", as recited in currently

amended, independent claims 29 and 56; and "a memory for storing said at least one specified merchant objective, which is inputted by a merchant, said at least one specified merchant objective including said specified time period and said specified budget as constraints; and a microprocessor configured to: generate a plurality of possible marketing strategies, each of said plurality of possible marketing strategies comprising a set of initiatives, which are deployed together in a given sequence for said specified time period, wherein said initiatives include any of bundling of products, cross-sells, up-sells, coupons, discounts, promotions, advertisements, surveys, and customer feedback, ... wherein said various actions are constrained by a choice of a marketing channel", as recited in currently amended, independent claim 43. Accordingly, Abe does not anticipate the subject matter of currently amended, independent claims 29, 43, and 56, and dependent claims 30-33, 38, 39, 44, and 45 under 35 U.S.C. §102(e). The rejection of canceled claims 40 and 53-55 is moot. Withdrawal of the rejection of claims 29-33, 37-40, 43-45, and 53-56 under 35 U.S.C. §102(e) as anticipated by Abe is respectfully solicited.

#### **IV. Formal Matters and Conclusion**

Claims 29-33, 36, 38, 39, 43-45, 47, 49-51, and 56 are pending in the application.

Applicants respectfully submit that the currently amended claims satisfy the statutory requirements of 35 U.S.C. §112, first paragraph, and §101.

With respect to the rejection of the claims over the prior art, Applicants respectfully submit that the currently amended claims are distinguishable over the cited prior art of record. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections to the claims.

In view of the foregoing, Applicants submit that claims 29-33, 36, 38, 39, 43-45, 47, 49-51, and 56, all the claims presently pending in the application, are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest time possible.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

Please charge any deficiencies and credit any overpayments to Attorney's Deposit  
Account Number 09-0441.

Respectfully submitted,

Dated: August 7, 2008

/Peter A. Balnave/  
Peter A. Balnave, Ph.D.  
Registration No. 46,199

Gibb & Rahman, LLC  
2568-A Riva Road, Suite 304  
Annapolis, MD 21401  
Voice: (410) 573-5255  
Fax: (301) 261-8825  
Email: Balnave@Gibb-Rahman.com  
Customer Number: 29154